GB Operating Instructions MIL 72/1 digi 20

WA-EKF 3045/10.97/S:MMS/D:Str./80.10.0736.7/97/00538

1. Putting into operation

Electrical units may only be installed and assembled by a skilled electrician. (The term "skilled electrician" is defined in VDE 0105).

Notes:
The unit contains well-designed electronic components which are largely protected against external interference. However, it must be remembered that extremely high interference voltage peaks can be superimposed on the mains voltage, depending on the installation site. Interference which, despite all internal protective measures, can also effect an electronic unit also arises when contactors are switched. In order to guarantee the greatest possible operational reliability, the following details must be observed:

a) In the case of larger systems, a suitable varistor or RC element must be used to provide interference suppression for contactor coils directly switched by the time switch.

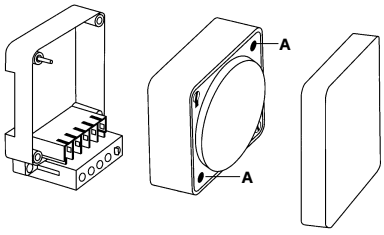
b) If inductive direct current loads are switched, a suppressor diode must be installed.

c) Inductive loads and particularly fluorescent lamps place particular demands on the output contacts. In each individual case, check whether it is appropriate to install an isolating relay or contactor.

2. Assembly and connection

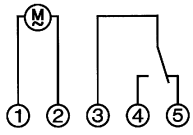
2.1 Surface-mounting

Fit the base in accordance with local conditions.
Fit the time switch and secure with the screws (A).



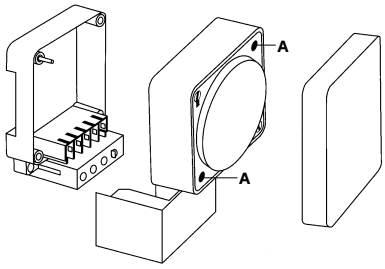
2.2 Connection

See unit imprint/circuit diagram.



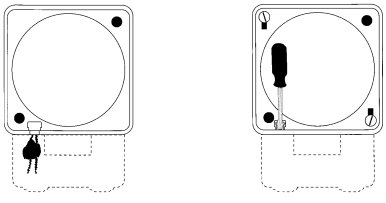
2.3 Assembly with accessory terminal cover

Fit the base in accordance with local conditions, connect and attach the terminal cover article-number 01.78.0004.6.
Then fit the time switch and secure with the screws (A).



3. Sealing with sealing glass – IP 40

Seal using the accessory sealing glass – attach and seal the sealing glass, article number 01.78.0016.6.
The sealing glass can only be removed with a suitable tool.



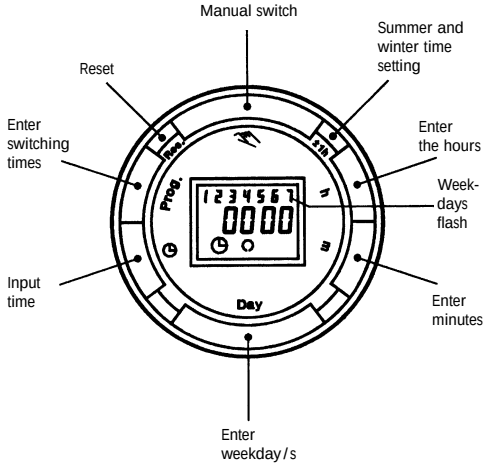
4. Operating the time switch

The steps marked with the symbol ► are necessary to carry out a switching program.

4.0 Preparing for Operation

► **4.1** Activate the "Res" switch (= RESET) to reset the time switch to its default settings (activate using a pencil or similar pointed instrument)
Do this
– every time you wish to "reset" the time switch
– to erase all switching times and the current time of day

After approximately two seconds the following display appears:



► **4.2 Enter current time and weekday**

– Keep the " ◷" key pressed down

During the summer time period press the +/–1h key once.

Enter the hour using the "h" key
Enter the minutes using the "m" key
Enter the day using the "Day" key
1 = "Monday" ... 7 = "Sunday"
– Release the "◷" key

The colon now blinks once a second.

Notes:
If you keep the "h" and "m" keys pressed down for more than 2 seconds, the display will enter fast-forward scroll mode.

► **4.3 Entering the switching times**

You have 20 memory locations available.
Each switching time takes up one memory location.

Keep pressing the "Prog" key until a free memory location is shown in the display "– – : – –"..

Programme ON or OFF with the " " key:
"◯" = OFF, "◉" = ON
Enter the hour using "h"

Enter the minutes using "m"

If a switching command is to be carried out every day (1 2 3 4 5 6 7) then store using the "◷" key, otherwise select the day(s) it is to be carried out by using the "Day" key.

When the day selection is left blank, the programmed switching instruction operates at the same time every day

1 2 3 4 5 6 = Monday – Saturday
1 2 3 4 5 = Monday – Friday
6 7 = Saturday – Sunday

Selection of single days: 1 = Mon., 2 = Tues. ...

Save the switching time with the "◷" key.

The time switch enters the automatic operating mode and displays the current time of day.

Begin any further entry of a switching time with the "Prog" switch

If your entry is incomplete, the segments not yet selected will blink in the display.

After programming is completed, and you return the timeswitch to the current time display with the " " key, the timeswitch will not activate any switching instruction required for the current time.
You may need to manually select the desired switching state with the " " key. Thereafter, as the unit encounters further switching instructions in the memory in real time, it will correctly activate all subsequent switching instructions.

Note:
Note what position the switch is in, ON ◉ or OFF ◯.
Depending on the switching program and the time of day, select the desired switch position with the key .
(For channel 1 and/or 2) e.g. ◉

5.0 Additional Functions

5.1 Switching from summer time to winter time and vice versa

Press the "+/–1h" key once

5.2 Manual Override Switch " "

With the " " you can change the current switching settings at any time. The switching program already entered is not altered.

Automatic Mode ◷	Manual Mode	Continuous Operation ◉ ◯
◷ ◉ = ON	◯ = OFF	◉ = Continuous ON
◷ ◯ = OFF	◉ = ON	◯ = Continuous OFF
The switching times correspond to the program entered.	If the current switching mode is changed manually, the next switching time will be carried out automatically again according to the entered switching program	You can only return to automatic mode from the continuously-ON ◉ and continuously-OFF ◯ switching modes by pressing " " key.

5.3 Reading the programmed switching times

Pressing the "Prog" key displays the programmed switching times until the first free memory location appears in the display "– – : – –".
If you now press the "Prog" key once again, the number of free memory locations will be displayed, e.g. FR 18.
If all memory locations are occupied,. the display "FR 00" appears.

5.4 Changing the programmed switching times

Press the "Prog" key repeatedly until the switching time you want to change is displayed.
You can now enter the new data. See point 4.3.

Notes on storing switching times:
If you end your entry of the switching times by pressing the "Prog" key, then the switching time you have entered will be stored and the next memory location displayed.
Entry of further switching times is also carried out as described in point 4.3.
In addition, a complete switching command is stored **automatically** after around 90 seconds provided **no other** key is pressed.
The time switch then enters the automatic operating mode and displays the current time again.

5.5 Deleting individual switching times

Press the "Prog" key repeatedly until the switching time you wish to delete is shown in the display.
Then set to "– –" using the "h" or "m" key and keep the "◷" key pressed down for around 3 seconds.
The switching time is now erased and the current time is displayed.

5.6 AM/PM time display

If you press the "+/–1h" and "h" keys at the same time, the time display switches into the AM/PM mode
(mostly used in English-speaking countries)

6.0 Technical data

Connection	see unit imprint
Switching capacity	see unit imprint
Ambient temperature	–10 °C to +55 °C
Running reserve	5 h at +20 °C
Memory locations	20
Shortest switching time	1 min.
Programmable	every minute